


DECLARATION

I, Rebecca Kelly, being an employee of Kenyon & Kenyon  
(One Broadway, New York, New York 10004), declare that I  
am a qualified translator of German to English and that I  
have carefully made the attached English language  
translation from the original document entitled:

"Bedienvorrichtung"  
[Operating Device]

and written in German; and that the attached translation  
is an accurate English version of such original to the  
best of my knowledge and belief.

  
Rebecca Kelly

Subscribed and Sworn to before me  
this 17th day of January, 2002.

  
Notary Public

**WILLIAM R. MCINTYRE**  
Notary Public, State Of New York  
No. 01MC5055799  
Qualified In New York County  
Commission Expires Feb. 20, 2006

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**  
**International application No. PCT/DE00/01781**

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**I. Basis of the report**

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1. This report has been drawn on the basis of (*Substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments*):

The description, pages:	re: German hand-written remarks in the original, see page 2
1-22	original version

The claims, Nos.:	The drawings, sheets/fig.:
1-10	original version
1/5-5/5	original version

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. STATEMENT**

Novelty (N)	Yes: Claims	6, 7, 9, 10
	No: Claims	1-5, 8
Inventive Step (IS)	Yes: Claims	6, 7, 9, 10
	No: Claims	
Industrial Applicability (IA)	Yes: Claims	1-10
	No: Claims	none

**2. CITATIONS AND EXPLANATIONS.**  
**see appended sheet**

**VII. Shortcomings found in the International Patent Application**

It has been found that the International Patent Application has the following shortcomings in form or content:  
**see appended sheet**

- 1). The following documents are referenced:

D1:EP-A-0 789 321

D2:WO-A-97/25657

D3:IBM-TDB, Vol. 32, no.9B, February: 1990: Mouse ball-  
actuating device with force and tactile feedback

- 2). **Re Section V.**

The present Application relates to an operating mechanism for an electrical device, the mechanism having a ball-shaped operating element operated by hand, which is supported rotatably about at least one axis. Furthermore, electrically operable means are provided which influence the torque required for rotating the operating element in such a way that the torque, during the rotation, is periodically easily increased, so that a feedback is created that can be felt with the hand (i.e. a haptic one) which is very similar to a mechanically created haptic feedback.

- 3). Referring to D1-D3, which documents already describe such a device:

In D1 a plunger is periodically pressed by an electrically operable coil against an operating element that is spherical and rotatable about an axis. This generates the electrically produced haptic feedback. D1 also describes the possibility of having the spherical operating element rotatable about several axes, rotation about one of the axes being totally blockable.

D2 describes a trackball operating device, whose ball is connected frictionally engaged, having two orthogonal axes, in the usual manner. Each of these axes is

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connected to an electrically controllable motor connected as a braking torque producer. While the ball is rotated, the braking torque is periodically increased, so as thereby to generate the haptic feedback signal.

D3 describes a mouse, whose ball is also connected frictionally engaged with two orthogonal axes in the usual manner. The periodically increased braking torque is xxxxx-ed<sup>1</sup> either by a plunger pressing against the ball or by an electromagnetic coil connected to each of the axes of rotation. Thus, the device according to Claims 1-5 is not novel (Article 33(2) PCT).

- 4). With regard to Claim 8, reference is made again to D3, in whose last paragraph the possibility is mentioned (to be sure, without going into details) that the rotational restraint of the mouse ball can be made dependent on an indicator setting in a context displayed on a screen ("menu-based system where the cursor placement is important"). That makes the operating device, claimed only generally in Claim 8, also not novel, according to Article 33(2) PCT.
- 5). The special refinement of the operating device in Claim 6 is not mentioned or made obvious in any of the documents mentioned above. Claim 6, and Claim 7 depending on it, should thus be viewed as novel and inventive according to Articles 33(2) and (3) PCT.

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<sup>1</sup>Translator's Note: The verb is missing.

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The same applies also to the special refinement in Claims 9 and 10.

6). **Re Section VII.**

Documents D1-D3 are not mentioned in the description as the most proximate related art (Rule 5.1(a)(ii) PCT), and the independent claim is not formally delimited from one of these documents (Rule 6.3(b) PCT).